

BELT AND SIDE IMPACT INFLATOR

ABSTRACT OF THE DISCLOSURE

The present invention provides an airbelt inflator (10) designed
5 primarily for supplying and directing gas from the combustion of gas generant
materials into a vehicle airbelt. Inflator (10) includes a substantially cylindrical
inflator body (12), having a first end (11) and a second end (13). A unique booster
cup (22) is positioned within inflator body (12), and is preferably press fit with
initiator body (15), suspending cup (22) within inflator body (12). Cup (22) facilitates
10 consistent burn of the main propellant, imparting repeatable bag performance. A
cylindrical mesh filter (38) is positioned in inflator body (12). A nozzle (36) is
preferably positioned adjacent a disc (30). A variety of different nozzles giving
inflator (10) varying gas output characteristics can be utilized with inflator (10), for
example thrusting inflators or thrust-neutral inflators, depending on the operating
15 requirements of the airbelt system. Booster cup (22) is sized such that it extends into
inflator body (12), and abuts filter (38), thereby serving as a stand off or locator for
filter (38), and providing a relatively snug packing arrangement for propellant tablets
(28).